

## Lahontan Regional Water Quality Control Board

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Randall Cates, Planner III  
Kern County Planning and Natural Resources  
2700 M Street Suite 100  
Bakersfield, CA 93301  
Phone (661) 862-8612  
catesr@kerncounty.com



File: CEQA  
Kern County

### **Comments on the Draft Environmental Impact Report, Gem Hill Quarry Project by CalPortland Company (PP21404), Kern County, State Clearinghouse No. 2021110076**

Lahontan Regional Water Quality Control Board (Water Board) staff received the Draft Environmental Impact Report (DEIR) for the above-referenced project (Project) on August 24, 2022. The DEIR, prepared by Kern County, was submitted in compliance with provisions of the California Environmental Quality Act (CEQA) in order to solicit input on the potential impacts to the environment and ways in which those significant effects are proposed to be avoided or mitigated. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the DEIR, we recommend the following additional environmental review: (1) evaluate the leachability of the proposed overburden stockpile materials and the potential for heavy metals or other elements to be entrained in stormwater or percolated into the ground; (2) classify the group of mining waste the overburden represents; and (3) confirm whether the Project is subject to water use restrictions imposed within the Antelope Valley adjudicated groundwater basin. Our comments are outlined below.

#### **PROPOSED PROJECT**

The Project proponent has submitted a Conditional Use permit (CUP) to Kern County to allow a surface mining operation and development of a reclamation plan on 82 acres of an approximately 210-acre site. The Gem Hill site proposes an open pit, multibench, drill and blast mine. The target material is naturally occurring pozzolan (volcanic tuff), used in the production of cement. No crushing or processing of mined material would occur onsite. The life of the operation is proposed to be 30 years. Annual mineral production is estimated to be 500,000 tons, and the maximum total mineral production is estimated to be 15,000,000 million tons. The total anticipated production of mine

waste (overburden) is estimated to be 600,000 tons, which would be disposed in two onsite stockpiles. The Gem Hill site is located within the Antelope Hydrologic Unit, Gloster Hydrologic Area and overlies the Antelope Valley and Fremont Valley groundwater basins.

## **WATER BOARD'S AUTHORITY**

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of the quality of waters of the State in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the United States. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the United States.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at [http://www.waterboards.ca.gov/lahontan/water\\_issues/programs/basin\\_plan/references.shtml](http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml).

## **COMMENTS ON THE PROPOSED PROJECT**

Based on our review of the DEIR, we recommend that the following issues be considered and addressed in applicable sections of the final environmental document.

1. The basaltic overburden and associated hydrothermal minerals are proposed to be blasted then transported to onsite stockpiles. Blasting will increase the surface area to volume ratio of this material, increasing the chemical reactivity. Project conditions such as mitigation measure 4.2-2 D.2 require water use for dust control, and weathering conditions on the ground surface will likely increase weathering rates of non-target minerals in the overburden. Water Board staff recommends a representative sample(s) of the proposed overburden material undergo a Toxicity Characteristic Leaching Procedure (TCLP) extraction to evaluate the potential leachability of constituents. Our concern is the potential for heavy metals or other potentially toxic elements to leach from the overburden and then become entrained in stormwater or percolate into the ground. Depending on the leachability of the overburden, additional mitigation measures may be required to protect the quality of surface water and groundwater.
2. The TCLP analyses are necessary in order to characterize the overburden and classify the group of mining waste that it represents in accordance with California Code of Regulations (CCR), title 27, section 22480. Depending on the waste

classification, certain waste containment, construction standards, and monitoring requirements may be applicable. Any Group A or Group B mining waste will require authorization under individual waste discharge requirements issued by the Lahontan Water Board in compliance with title 27, CCR. Group C mining wastes are generally those types of waste that would otherwise be in compliance with water quality regulations except for turbidity and would require robust precipitation and drainage controls be installed and maintained throughout the life of the Project.

3. The proposed mine site and subterranean basaltic aquifer is located between two groundwater basins, Antelope Valley and Fremont Valley. The Project proposes a supply well on the north end of the property to be drilled into this basaltic aquifer to provide water for Project activities at a rate of 18-acre feet per year. The basaltic aquifer is thought to be distinct and isolated from the adjacent groundwater basins and that the basaltic aquifer has negligible in-situ groundwater recharge and is instead recharged from the adjacent groundwater basins. Water Board staff recommend consultation with the Antelope Valley Water Master to confirm whether the Project is subject to water use restrictions imposed within the Antelope Valley adjudicated groundwater basin.

Thank you for the opportunity to comment. If you have any questions regarding this letter, please contact me at (760) 243-444 ([andrew.robinson@waterboards.ca.gov](mailto:andrew.robinson@waterboards.ca.gov)) or Jan Zimmerman, Senior Engineering Geologist, at (760) 241-7376 ([jan.zimmerman@waterboards.ca.gov](mailto:jan.zimmerman@waterboards.ca.gov)).



Andrew Robinson  
Environmental Scientist

cc: California Department of Fish and Wildlife ([R6LSA@wildlife.ca.gov](mailto:R6LSA@wildlife.ca.gov))  
State Clearinghouse (SCH 2021110076) ([state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov))